

Curriculum Vitae

Mohammad Ali Hamad Abbas

Date: March 2023



1. Personal Details

1.1. Personal definition

Name	Mohammad Ali Hamad Abbas
Date of Birth	1951
Place of Birth	Sudan
Gender	Male
Marital Status	Married
Nationality	Sudanese
Academic Status	Associate Professor
Department	Electrical & Electronic Engineering
Faculty	Engineering
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1.2. Field of Work: Electrical Engineering

1.3 Special Interest: Telecommunications Engineering

2. Academic Qualifications

Degree	Institution	Country	Date
PhD	University of Bradford	U.K.	1979
MSc	University of Bradford	U.K.	1976
BSc	University of Khartoum	Sudan	1973

3. Academic Appointments

Position/Title	Institution/ country	Date
Associate professor	U of K/Sudan	July/1992
Assistant professor	U of K/Sudan	September/1979
Teaching assistant	U of K/Sudan	July/1973

4. Specialised/ Professional Training

Training	Institution / Country	Date
Postdoctoral Associate (for three months)	University of Bradford/UK	1989

5. Professional Courses & Workshops Attended

Training Course/ Workshop	Body	Country	Date
1-week workshop on 'Telecommunication Networks Interconnection Cost Modelling'	International Telecommunications Union	Syria	2010
2-week course on 'Computer Networks'	University of Khartoum	Sudan	2001
1-week course on 'INMARSAT Systems'	INMARSAT Programme of Cooperation, SudaTel Co, Sudan.	Sudan	1997
1-week workshop on 'Rural Telecommunications'	International Centre for Theoretical Physics,	Italy	1993

	Trieste, Italy		
2-weeks course on 'Physics of Communications'	International Centre for Theoretical Physics, Trieste, Italy	Italy	1983
2-weeks workshop on 'Modern Digital Signal Processing'	Arab School of Science & Technology, Zabadani, Syria	Syria	1983
1-week course on 'University Teaching Methods'	University Teaching Methods Institute (UTMI), University of London, UK	UK	1976

6. Courses Taught

i) At Undergraduate Level

Course Title
Introduction to Electrical Engineering
Telecommunications-I
Telecommunications-II
Antennas & Propagation
Signals and Systems
Electric Circuits
Electronics
Electromagnetic Fields Theory
Information Theory
Digital communications
Optical Fibre Communication Systems

ii) At Postgraduate Level

Course Title
Digital Communications

Satellite Communications
Wireless & Mobile Communications
Spread Spectrum Communications
Performance Engineering
Signals and Systems Analysis
Optical Communication Systems
Macro Environment and Telecommunications
Data Communication

iii) Staff Training

Training	Staff Grade	Institution	Date
<p>Course: Plesiochronous & Synchronous Digital Hierarchies</p> <p>This continuous education professional telecommunication course was delivered in depth and detail a few times to groups of engineers of Sudatel Co. Each time the course was delivered in a span of 30 hours.</p>	University Graduates	Sudatel Telecm Company	1996-2002
<p>Course: Satellite Intermediate Data Rate Systems</p> <p>As with the previous course this continuous education professional telecommunication course was delivered in depth and detail a few times to groups of engineers of Sudatel Co. Each time the course was delivered in a span of 30 hours.</p>	University Graduates	Sudatel Telecm Company	2000-2003
<p>Digital Subscriber Line (xDSL) Techniques</p> <p>Same applies to this course as in the case of the two above</p>	University Graduates	Sudatel Telecm Company	2004
Course: Digital Signal Processing	University	Nile	2006

This academic course was delivered to Nile Electronics Centre engineers. The exposition was similar to that of MSc level. About 20 hours were needed to cover the course material.	Graduates	Electronic Centre	
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7. Administrative & Professional Responsibilities & Activities

7.1. Administrative Responsibilities

Date	Position
2005 to date	Coordinator, Telecommunication & Information Systems master programme. This programme was conceived in 1986 with the help of Bradford University, UK, under a British Council link, and its delivery started in 1990. By now, fifteen batches of intake graduated from this programme, a total of approximately 250 graduates.
2015-2016	Director, Space Research centre
1998 – 2001	Director , University Computer Centre
1992-1996	Dean, Faculty of Engineering & Architecture
1991-1992	Deputy Dean, Faculty of Engineering & Architecture
1985-1987	Head, Department of Electrical Engineering

7.2. New Establishments

Date	Establishment
2015/2016	Space Research Centre: Chaired the committee formed by the Dean, Faculty of Engineering, to lay down the Statute for the Space Research Centre(SRC). Presented the committee proposal for the establishment of the SRC to the Senate which passed a resolution according to which the SRC was established in Dec 2015. Being the first manager of the SRC, I had to start its activities by convening the SRC Council so as to lay down the by-laws and form the scientific committee and other components of the SRC. I had to prepare the annual budget and develop with the scientific committee the short-term research plan and present them to the SRC Council. I also had to solicit finance for the

	establishment of the SRC and the execution of the research programme.
1992-1996	<p>Departments of Mining Eng & Petroleum Eng: As a new dean of the Faculty of Engineering, one had to continue with the work started by the honourable previous deans in relation to the establishment of the departments of Mining & Petroleum Eng. A lot of work was already done including preparation of the curricula and academic plans. Two staff members were already appointed as heads of the two departments.</p> <p>The Faculty received a fund from the Ministry of Higher Education for building lecture rooms and labs for the new departments.</p> <p>Together with the heads of the two departments we were tasked to visit the Neft and Gaz Institute in Baku, Azerbaijan, and some other institutions in the region to benefit from their experience in the these areas of education.</p> <p>We decided to start the Mining Engineering programme with emphasis on the production aspects and in the first two years to use the Civil Eng labs and in the meantime equip the specialised labs. We also decided to start the Petroleum Eng programme with the processing aspects and use the Chemical Eng labs initially and add the specialised labs progressively.</p> <p>Two DAAD MSc scholarships, one in Mining Eng and another in Petroleum Eng, were granted to the two teaching assistants.</p> <p>For the Mining Eng, besides the Head of the Department, the University managed to recruit a staff professor from Iraq, while for the Petroleum Eng the Chemical Eng staff was a great support.</p>
2004-2010	<p>Establishment of the Faculty of Engineering at the International University of Africa(IUA): In 2004 the Vice-Chancellor of the IUA requested me to shoulder the responsibilities of the Dean, on part-time basis, and help the IUA with the establishment of an engineering faculty. A committee headed by the VC was formed to lay down the general plan and design the academic curriculum. The faculty started with its first student's in-take in 2005. I looked after the establishment of the labs and lecture</p>

	<p>rooms, arrangements for the field technical training, recruitment of the academic and other staff and running of the academic process in general in collaboration with other IUA faculties. The Faculty managed to receive a donation for purchase of computer lab equipment. Later on the IUA received another donation to establish a computer wide area network linking its different campuses together and to the Internet.</p> <p>The faculty started with an electrical engineering department with power, control, telecommunication and software engineering specialisations. Later on mechanical and civil engineering departments were added. The first graduates of the Faculty received their degrees in 2010.</p>
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7.3. Other Activities

Date	Activity
2012 to date	<p>Chairman of the Technical Committee (TC) which is a standing committee of the Telecommunications & Post Regulatory Authority (TPRA). TPRA is the regulatory body that is responsible for overlooking the telecom sector and enforcing the national telecommunications policies. The TC studies and drafts appropriate regulatory policies, directives, orders and bye-laws in collaboration with TPRA staff and management and pass them to TPRA Board of Directors for approval.</p> <p>I also acted as Chairman of some of the Ministry of Telecommunication and TPRA ad hoc committees like Telecommunication Policies Committee, Broadband Committee, Spectrum Management Policies Committee, Interconnection Tariff Committee, and as member of some other committees like Committee to prepare a Request for Proposal (RFP) for a license for a Second Mobile Operator, Committee for evaluation of the bids in response to the RFP for the second mobile operator license, Second Mobile Operator Selection and Negotiation Committee, 4G Mobile Radio Spectrum Pricing and Negotiation Committee, the Economical Effects of the Telecom Sector Committee, Spectrum Auction Committee, Licensing Bylaws Committee, ...</p>

2015	Chairman, Committee for drafting the National Policies on Information and Communication Technologies and Post. The draft policy document was then distributed to a sample of stakeholders for consultation and soliciting their comments. A public meeting was then convened where the draft was thoroughly discussed and amendments were suggested. The committee revised the draft document in the light of these amendments and finally passed the document to the Council of Ministers, which approved the same.
2000-2014	Member of the Engineering Committee, which is a standing committee, formed by the Ministry of Higher Education to establish standards for the higher education in the fields of engineering and technology and monitor the performance of the higher education engineering colleges, for three 2-year terms during the indicated date span.
2011	Member, Committee that conducted a prefeasibility study of Sudan Telecommunication Satellite project. As different telecom and broadcasting services could be delivered through such a system a preliminary study on the possible success of such project was conducted.
1997- 2009#	Member, Board of Directors of the Telecommunications & Post Regulatory Authority (TPRA) for 3 terms of 2 years each during the date span indicated.
2008	Member, Committee, formed by the President of Sudan, which investigated the crash incident of the Sudan Airways Airbus 310 aeroplane.
1985-2005	Member, the Sudan Engineering Council (SEC) for 5 terms of 3 years each and Member of the SEC Academic Board (advisory to SEC on accreditation of engineering curricula) for 4 terms during the span of dates indicated.
1999	Member, Consultant Committee on National Information Network. This committee was tasked with the duty of laying down a plan for a national information network linking the state departments to facilitate decision making and also help with the realisation of an e-government setup.
1997	Member, Committee that evaluated the cost of electricity supply

	in Sudan.
1996	Member, Committee that investigated the problems related to the thermo- and hydro-electric power generation in Sudan
1994-1995	Member, Board of Directors of the Sudan Telecom company – Sudatel. Besides that also acted as chairman of the Board’s Technical Committee.
1995	Member, Committee that investigated methods of jointly using the telecommunication networks owned by the different governmental departments and devise ways of coordination between these entities
1993-1994	<p>Transformation of Sudan Telecommunication Public Corporation(STPC) into a Joint-Stock Public Company: As a member of a group of 4 scholars, we were tasked by the Committee for the Disposition of Public Utilities (CDPU) during 1991 to conduct a feasibility study on the privatisation of the telecommunications sector and transformation of the Sudan Telecommunications Public Corporation (STPC) into a Joint-Stock Public Company. The study took 1 year and final report was received by CDPU in January 1992</p> <p>In 1992 the Committee for the Disposition of Public Utilities established a committee for the liberalisation of the telecommunication sector. I was the chairman of the technical section of this committee. The first step in the liberalisation programme was to consider the transformation of STPC into a Public Company. The technical section of the committee was tasked with the responsibility of handling the technical issues, terms of reference being to prepare technical and economical promotional studies, promote, negotiate with interested investors, provide them with the relevant information and answer their queries and lay down a strategy for the formation of the new company.</p> <p>In 1994 Sudatel was formed as a public company marking the first step in the telecom sector liberalisation process.</p>
1994	Member, Board of Directors of the National Electricity Corporation (for 1 year)
1987-1992	Member of the Sudan Engineering Society (SES) Council for 2 terms of 2 years each and secretary of the SES Council for one

	term.
1990	Member, Committee that investigated the technical and administrative performance of the Sudan Sound and TV Broadcasting Corporation

8. Membership

Status	Association/ Society	Town//Country	Date
Member	Sudan Engineering Society	Sudan	1985
Specialist	Sudan Engineering Council	Sudan	1987

9. Contribution to Some Professional Activities

Status	Activity	Country	Date
Presenter	NTC Public Workshop on “Telecommunication Towers”. Delivered a presentation on the safety issues related to the radiation from base transceiver stations	Sudan	8/8/2017
Speaker	NTC Symposium: Transformation of Private Cellular Radio Companies into Public Companies. My talk focussed on the technical benefits of such transformation. There were other speakers who addressed other issues like market and competition and regulatory issues.	Sudan	2016
One of ITU Expert Instructors	ITU, World Bank and Federal Government of Somalia, Ministry of Posts and Telecommunications: Dialogue with Telecoms Stakeholders of Somalia. This workshop was meant to help Somalia to establish a telecommunication regulatory system to overlook and regulate its telecom sector. In this workshop I delivered a presentation titled: “Legal and Institutional Framework	Kenya	22-23 Sep 2014

	and Implications on the Draft Communications Act for Somalia” and acted as a facilitator of the session on “Establishing licenses for Somalia operators”		
Presenter	NTC Public Lecture on “Smart Water Management”. This was a survey of many presentations delivered at the ITU Workshop on “ICT as an Enabler for Smart Water Management”, Luxor, Egypt, 14-15 April 2013. This NTC lecture was meant to associate the managerial and technical staff of the Sudan utility departments with the importance and techniques of smart water management.	Sudan	17/6/2013

10. Supervision of Research Work

University of Khartoum

Degree	BSc. graduate graduation projects	MSc partial fulfilment	MSc. Full thesis	PhD thesis
Supervision	>80	42	7	12
Co-supervision				2

11. PUBLICATIONS

Please refer to my profile on Google Scholar: Link: mabbas@uofk.edu